Turnout Gear

02/11/2021

1.0 Introduction

The City of Gallatin Fire Department is seeking bids for the purchase of 92 sets of Turnout Gear. Bids will be due on March 5th 2021 at 3:00 pm in a sealed envelope clearly marked: **Turnout Gear**

2.0 Scope of Work

The City of Gallatin seeks to purchase at a not to exceed amount of 92 sets of Turnout Gear for the Gallatin Fire Department. The scope of this purchasing specification encompasses design, construction, materials and performance criteria deemed necessary for turnout gear utilized for structural firefighting. Turnout gear manufactured in accordance with this specification are designed to mitigate adverse environmental effects to the firefighter's body while providing the specifying authority with what is in their opinion, essential requirements.

3.0 Technical Requirements

SECTION 1 – GENERAL INFORMATION

SCOPE AND PURPOSE

The following specification describes the minimum requirements for the materials, design and construction of protective clothing ensembles, excluding head and hands, affording protection against the adverse hazards associated with Structural Firefighting activities and certain other emergency operations as defined by NFPA 1971, *Standard on Protective Ensemble for Structural Fire Fighting,* 2018 Edition

_____COMPLIANT _____ NON-COMPLIANCE

THERMAL PROTECTIVE PERFORMANCE

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 35 when tested in accordance with NFPA 1971 standard. **This is a minimum requirement, no exceptions shall be considered.**

_____COMPLIANT _____ NON-COMPLIANCE

TOTAL HEAT LOSS (THL)

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 205 when tested in accordance with NFPA 1971 standard. **This is a minimum requirement, no exceptions shall be considered.**

_____COMPLIANT _____ NON-COMPLIANCE

CONDUCTIVE AND COMPRESSIVE HEAT RESISTANCE (CCHR)

Using breathable materials as outlined in the section titled Breathable Materials, there shall be a minimum area of 4-inch x 4-inch (10.2 cm x 10.2 cm) at the shoulders that provide a minimum of 25 CCHR at 2 psi, and a minimum 6-inch x 6-inch (15.2 cm x 15.2 cm) area at the knees that provide 25 CCHR at 8 psi. All three compression areas shall be constructed of high temperature fiber-based materials and sewn to the thermal liner on the inside of the liner toward the moisture barrier.

_____COMPLIANT _____ NON-COMPLIANCE

THIRD PARTY TESTING

All components used in the construction of these garments shall be tested for compliance to NFPA Standard #1971 (2018 revision) by Underwriters Laboratories (UL). Underwriters Laboratories shall certify and list compliance to that standard. Such certification shall be denoted by the Underwriters Laboratories certification label.

_____COMPLIANT _____ NON-COMPLIANCE

ISO CERTIFICATION / REGISTRATION

The protective clothing manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality.

_____COMPLIANT _____ NON-COMPLIANCE

LABELING

Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language:

DO NOT REMOVE THIS LABEL

THIS GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971,

STANDARD ON PROTECTIVE ENSEMBLE FOR

STRUCTURAL FIRE FIGHTING, 2018 EDITION

Additionally, the label(s) shall include the following information:

Compliance to NFPA Standard #1971 - 2018 edition

Underwriters Laboratories classified mark

Manufacturer's name

Manufacturer's address

Manufacturer's garment identification number

Bar Code

Date of manufacture

Size

Fiber contents

_____COMPLIANT _____ NON-COMPLIANCE

EXCEPTIONS TO SPECIFICATIONS

Any and all exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

SECTION 2 – COMPONENTS

THREAD

Garment shall be assembled using only 100% NOMEX® Thread. **This is a minimum requirement, no exceptions shall be considered.**

_____COMPLIANT _____ NON-COMPLIANCE

HOOK AND LOOP (VELCRO)

All references to Velcro® (e.g. USA Velcro®) will be defined as Flame Resistant hook and loop Velcro and shall be and black in color. The use of aramid hook and loop Velcro shall not be permitted.

_____COMPLIANT _____ NON-COMPLIANCE

OUTER SHELL MATERIAL

The outer shell shall be constructed of "**AGILITY"** KEVLAR®/NOMEX®/Polyoxazole blend material with "Enforce Technology" with an approximate weight of 6.6 oz. per square yard in a twill weave. The shell material must be treated with a durable water-repellent finish that also enhances abrasion resistance.

_____COMPLIANT _____ NON-COMPLIANCE

THERMAL LINER

The thermal liner shall be constructed of **"CALDURA® SL2 Elite"**; one layer of 1.5 oz. and one layer of 2.3 oz. per square yard E-89 spunlaced NOMEX®/KEVLAR® aramid blend, quilt stitched to a 3.9 oz. per square yard Caldura® SL face cloth yarn combination of Lenzing/Kevlar/Nylon spun yarns and KEVLAR Filament, with a finished weight of approximately 7.7 oz. per square yard.

The thermal liner shall be attached to the moisture barrier at the perimeter of the liner system employing a self-binding.

_____COMPLIANT _____ NON-COMPLIANCE

MOISTURE BARRIER

The moisture barrier shall be **"STEDAIR 3000"** ePTFE engineered using an E-89 substrate and BHA Technologies ePTFE membrane. The Stedair bi-component ePTFE membrane is a combination of microporous and monolithic technologies.

The moisture barrier material shall meet all moisture barrier requirements of NFPA 1971-2018 edition. All moisture barrier seams shall be sealed with a minimum 1-inch wide sealing tape. One side of the tape shall be coated with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.

_____COMPLIANT _____ NON-COMPLIANCE

SECTION 3 – COAT DESIGN AND CONSTRUCTION

COAT CONSTRUCTION

The body of the shell shall be constructed of three (Attack and Battalion) four (Stealth) separate body panels consisting of two front panels and one back panel and shall be joined together by double stitching with NOMEX® thread using stitch type #301, #401, and #516. The body panels shall be shaped to provide a tailored fit thereby enhancing mobility.

_____COMPLIANT _____ NON-COMPLIANCE

SIZING

The coats will be available in numeric sizing with 2-inch chest increments and 1" sleeve length measurements. The length of the coast will be measured from the rear collar and back to the hem of the coat and will be approximately 28-inches in the front and 34 inches at the rear hem. *(Stealth)*

Generalized sizing, such as small, medium, large, etc., will not be considered acceptable. All patterns will be graded to size to insure proper fit.

_____COMPLIANT _____ NON-COMPLIANCE

LINER SYSTEM CONSTRUCTION

The thermal liner will be sewn to the moisture barrier at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The thermal liner and moisture barrier shall be stitched together and turned and top stitched to create a self-binding. The cuffs of the coat and pant liner system will have a binding of Stedprene on cotton poly to eliminate the possibility of wicking contaminants. The moisture barrier/thermal liner shall finish no more than 1-inch from the cuffs and 2-inch from the hem.

There will be an extra internal layer of thermal liner material sewn on the shoulder area of the liner system for increased protection and insulation. The extra layer will be sewn to the thermal liner layer only.

The coat liner system contains an internal pocket made of 1-layer of outer shell material and measures approximately 7-inches by 9-inches and is sewn on the left front panel.

_____COMPLIANT _____ NON-COMPLIANCE

MOISTURE BARRIER / THERMAL LINER ATTACHMENT

The thermal liner and moisture barrier shall be completely removable from the coat shell. Strips of ⅝-inch wide FR Velcro shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the collar (see Collar section). The loop portion of the Velcro shall be attached to the liner system with the hook fastener attached to the outer shell.

The remainder of the thermal liner/moisture barrier shall be secured with a minimum of five snap fasteners appropriately spaced on each coat facing and two snap fasteners at each sleeve end.

The thermal liner and moisture barrier shall be completely removable from the pant shell. Seven snap fasteners shall be spaced along the waistband to secure the thermal liner/moisture barrier to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of two snap fasteners per leg.

_____COMPLIANT _____ NON-COMPLIANCE

INSPECTION PORTAL (COAT)

The liner system will have an opening located at the rear bottom hem for the purpose of internal inspection. The opening will measure approximately 10-inches long and will be secured closed by corresponding 1-inch wide strips of FR Velcro installed on the liner system layers.

_____COMPLIANT _____ NON-COMPLIANCE

"EASY GRIP" DRAG RESCUE DEVICE (DRD)

A removable Firefighter Drag Rescue Device shall be installed in each coat. Two ends of a 1½-inch wide aramid strap will be sewn together to form a continuous loop. The strap will be installed in the coat between the liner system and outer shell such that when properly installed will loop around each arm. The strap will run through an access port located on the upper back of the coat and designed to fit between the shoulder straps of an SCBA.

A 3-inch by 4-inch (Home Plate) "Easy Grip" patch constructed of outer shell material will be attached to the strap on the outside of the coat. The "Easy Grip" patch will cover the access port and will secure to the outside of the coat by hook and loop Velcro. The "Easy Grip" patch will be covered with a reflective Lakeland logo patch for increased visibility to clearly identify the feature and will have the Lakeland symbol along with bold lettering: **DRD.**

_____COMPLIANT _____ NON-COMPLIANCE

COLLAR AND THROAT TAB

The collar of the coat shall measure not less than three inches in height and will be graded to size. The collar will be a four-layer construction with two outside layers of outer shell material encapsulating two layers of moisture barrier. The rear internal layer of moisture barrier will be stitched at the perimeter of the collar only. The forward layer of moisture barrier shall be quilt stitched to the front outer shell layer of the collar to trap air and increase thermal insulation. The collar shall extend to the leading edges of the coat front body panels so that no gap occurs at the throat area.

A strip of 5/8 inch FR hook Velcro will be sewn to a 1-inch wide outer shell extension panel running the full length of the inside lower edge of the collar. It will be positioned to engage a corresponding piece of 5/8 inch FR loop Velcro along the neckline of the liner system.

The throat tab will be a four-layer construction with two layers of outer shell material encapsulating two center layers of moisture barrier material. The throat tab shall measure not less than 3-inches high by 10-inches long and will be of a scooped design for proper interface with an SCBA mask. The throat tab will be attached to the forward right front side of the collar. The throat tab will be secured in the closed and stowed position with FR hook and loop Velcro. A 1½-inch square piece of FR hook Velcro will be sewn to the inside of the end of the closure strap. A corresponding piece of FR loop Velcro measuring 1½-inches by 3-inches shall be sewn horizontally to the left outside leading edge of the collar, thereby providing a high degree of collar strap adjustment when wearing a breathing apparatus mask. In order to provide a means of storage for the closure strap when not in use, a 1½-inch square piece of FR loop Velcro will be sewn to the forward right front side of the collar immediately in front of the throat tab. The throat tab shall fold in half for storage.

A hanger loop constructed of a double layer of outer shell material will be located at the top rear of the collar.

_____COMPLIANT _____ NON-COMPLIANCE

PLEATED BACK

The back of the jackets will have two 2-inch outward facing vertical pleats sewn into the jacket outer shell. The pleats will extend from the top of the shoulder seam near the sleeves and will extend down the sides of the jacket. The pleat will taper from two inches in width at the top while narrowing to a point at the bottom end.

The liner will have two corresponding pleats on the back that will fall adjacent to the outer shell pleats to avoid bulk in the shoulder area. The shell and liner pleats will facilitate extended range of motion while reducing the likelihood of compression burns at the upper back and arm area of the coat.

_____COMPLIANT _____ NON-COMPLIANCE

LINER SHOULDER THERMAL ENHANCEMENT

An additional layer of thermal liner material shall be used to increase thermal insulation in the shoulder area of the liner system. This thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam. The shoulder thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only.

_____COMPLIANT _____ NON-COMPLIANCE

SLEEVES

The sleeves shall be of two-panel construction and set-in type configuration. The sleeves shall be ergonomically curved to follow the natural shape of the arm unlike straight, tubular sleeve configurations. An underarm expansion pleat shall be incorporated between the underside of the sleeve and the body of the coat and shall be used in all layers of the garment (shell, moisture barrier, and thermal liner) to provide for a high degree of uninhibited arm and shoulder movement.

_____COMPLIANT _____ NON-COMPLIANCE

SLEEVE CUFF REINFORCEMENT

The sleeve cuffs shall be reinforced with black "Stedshield" material. The cuff reinforcements shall not be less than 2 inches in width and folded in half, approximately one half inside and one half outside the sleeve end for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the sleeve end.

_____COMPLIANT _____ NON-COMPLIANCE

WRISTLETS

Each coat shall be equipped with **Black 100% KEVLAR® hand and wrist guards** (over the hand) not less than 7-inches in length and of double thickness. A separate thumbhole with an approximate diameter of 2-inches shall be recessed approximately 1-inch from the leading edge. The thumbhole will have a turned finished edge.

_____COMPLIANT _____ NON-COMPLIANCE

SLEEVE WELLS

The wristlets shall be sewn to flame resistant Black Stedprene coated cotton/polyester moisture barrier material, which in turn shall be sewn to the inside of the sleeve shell approximately five inches from the sleeve cuff. This sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The Stedprene moisture barrier material shall also line the inside of the sleeve shell from the cuff to a point approximately five inches up, where it joins the sleeve well and is double stitched to the shell. Two NOMEX® snap tabs will be sewn into the juncture of the sleeve well and wristlet. The tabs will be spaced equidistant from each other and shall be fitted with female snap fasteners to accommodate corresponding male snaps in the liner sleeves. This configuration will ensure there is no interruption in protection between the sleeve liner and wristlet.

_____COMPLIANT _____ NON-COMPLIANCE

COAT FACINGS

The coat will incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 3-inches wide, extend from collar to hem and be double stitched to the underside of the outer shell at the leading edges of the front body panels. A Breathable moisture barrier material shall be sewn to the coat facings and configured such that it is sandwiched between the coat facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. The thermal liner and moisture barrier assembly shall be attached to the coat facings by means of snap fasteners.

_____COMPLIANT _____ NON-COMPLIANCE

STORM FLAP

The storm flap will be centered over the left and right side body panels to ensure there is no interruption in thermal or moisture protection. The storm flap will consist of 2-layers of moisture barrier sandwiched between 2-layers of outer shell material measuring approximately 23.75-inches by 4.25-inches wide. The storm flap is sewn onto the right (left *for Stealth*) panel of the coat and positioned within 0.5-inch of the collar attachment seam to prevent leakage.

_____COMPLIANT _____ NON-COMPLIANCE

NAPOLEON POCKET

Under the storm flap in the upper chest area will be a slit style pocket (Napoleon pocket) located under the left front body panel. The pocket opening shall measure approximately 5-inches long. The inside pocket shall measure approximately 5-inches by 8-inches. The pocket shall be located between the outer shell and the liner system.

_____COMPLIANT _____ NON-COMPLIANCE

DRAW CORD

The jacket will be equipped with a "Draw-Cord" on the inside rear of the outer shell. A 1-inch wide layer of outer shell material will be sewn to the inside rear jacket panel from side seam to side seam, just above the pockets, to create a tunnel for the Draw-Cord. The Draw-Cord will be constructed of KEVLAR cording. The Draw-Cord locking "Barrel" mechanism will be constructed of NFPA compliant High Temp polymer.

The employment of the Draw-Cord will gather the extra bulk of the outer shell around the torso to rear of the jacket so the front will remain flat for improved access to pockets. This will prevent bunching of the excess material at that the front of the jacket when donning and securing an SCBA strap.

_____COMPLIANT _____ NON-COMPLIANCE

STORM FLAP AND COAT FRONT CLOSURE SYSTEM

The coat shall be closed by means of (zipper and Velcro) a 22-inch size #10 heavy duty high-temp polymer zipper on the coat fronts and FR Velcro on the storm flap. The teeth of the zipper shall be mounted on NOMEX® cloth and shall be sewn into the respective coat facings. The storm flap shall close over the left and right coat body panels and shall be secured with FR Velcro. A 1½-inch by 24-inch piece of FR loop Velcro shall be installed along the underside leading edge of the storm flap. A corresponding 1½-inch by 23-inch piece of FR hook Velcro shall be sewn to the front body panel and positioned to engage the loop Velcro when the storm flap is closed over the front of the coat.

_____COMPLIANT _____ NON-COMPLIANCE

BELLOWS/HANDWARMER

Each coat will be equipped with Bellows/Handwarmer pockets on the left side and right side of the front of the coat. The pockets shall be located at the bottom of the coat near the storm flap and be double stitched to the respective body panels. Retro-reflective trim shall run over the bottom of the pockets so as not to interrupt the trim stripe. Two rust resistant metal drain eyelets shall be installed in the bottom of each expansion pocket to facilitate drainage of water. The lower half of the bellows pocket will be reinforced with an extra layer of KEVLAR Twill material on the inside. The pockets shall measure 2-inch deep by 8-inch wide by 8-inch high. The bellows portion of the pocket will be accessed from the top.

The pocket flaps will be constructed of two layers of outer shell material, and shall measure 5-inches deep and ½-inch wider than the pocket. Two pieces of 1½-inch by 3-inch FR Velcro will secure each flap in the closed position. The Velcro on the flap will be oriented in a vertical position while the Velcro on the pocket will be oriented horizontally allowing for the flap to be secured when the pocket is fully expanded. The upper pocket corners and pocket flaps shall be reinforced with bartacks.

Additionally, a separate hand warmer pocket compartment will be provided under the expandable cargo pocket. This compartment will be accessed from the rear of the pocket.

_____COMPLIANT _____ NON-COMPLIANCE

POCKET PULL-TABS

Every pocket on the garment shall be equipped with Pocket Pull-Tabs constructed of a double layer of outer shell material. The Pull-Tabs shall measure approximately .75 x1.5-inches and located at the bottom center of the pocket flaps to facilitate opening or pulling up the pocket flap.

_____COMPLIANT _____ NON-COMPLIANCE

UNIVERSAL FLASHLIGHT HOLDER

Each jacket shall be equipped with an inward facing safety hook/coat snap and two specially configured straps to hold a flashlight. The inward facing safety hook/coat snap shall be attached to the upper chest in a vertical position. The inward facing snap hook will accommodate the top metal ring portion of the flashlight. A Self-Material strap measuring approximately 1-inch high and 2-inches wide, shall sit below the snap hook/coat snap and will accommodate the clip portion of the flashlight. The lower strap shall measure approximately 2½-inches high and 9 inches wide, and will hold the barrel of the flashlight. The lower strap will be equipped with a 1½-inch by 2½-inch flame resistant hook and loop closure at the front of the strap to facilitate easy removal of the flashlight. The Universal Flashlight Holder shall be sewn to the jacket on the right chest.

_____COMPLIANT _____ NON-COMPLIANCE

RADIO POCKET with VELCRO ANTENNA OPENINGS

Each coat shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the coat, and shall have one drainage eyelet in the bottom of the pocket. The pocket flap shall be constructed of 2-layers of outer shell material measuring approximately 5-inches deep and ¼-inch wider than the pocket. The top of the flap shall be stitched to the coat with a 1.5-inch stitch only in the center of the flap leaving approximately 1-inch unsecured on each side. Those portions of the flap shall be secured in place with ½-inch Velcro. The Velcro on the flap can easily be unsecured to accommodate an antenna. The pocket flap shall be closed by means of FR Velcro. A 1½-inch by 3-inch piece of FR hook Velcro shall be installed vertically on the inside of the pocket flap beginning at the center of the bottom of the flap. A 1½-inch by 3-inch piece of FR loop Velcro shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook Velcro. In addition, the entire inside of the pocket shall be lined with Stedprene coated cotton/polyester moisture barrier material to ensure that the radio is protected from the elements. The moisture barrier material shall also be sandwiched between the two layers of outer shell material in the pocket flap for added protection. The radio pocket shall measure approximately 2 inches deep by 3.5 inches wide by 8 inches high and shall be installed on the left chest.

_____COMPLIANT _____ NON-COMPLIANCE

MICROPHONE STRAP

A strap shall be constructed to hold a microphone for a portable radio. It shall be sewn to the coat at the ends only. The microphone strap shall be mounted above the radio pocket and shall be constructed of double layer outer shell material.

_____COMPLIANT _____ NON-COMPLIANCE

RETROREFLECTIVE FLUORESCENT TRIM AND PATTERNS

The retroreflective fluorescent trim shall consist of 3-inch lime/yellow 3M Triple Trim (L/Y borders with silver center).

Each coat shall have retroreflective fluorescent trim double stitched heat sealed to the outside of the outer shell to meet the requirements of NFPA #1971 (2018 edition) and OSHA. The trim pattern shall be:

NYC style

3-inch wide stripes:

around each sleeve at the cuff and above the elbows (the upper sleeve stripe will have an underlayment thermal reinforcement layer of Stedprene on cotton poly for protection against Stored Energy burns)

around the hem of the entire coat

horizontally across the chest and around the back below the sleeves.

_____COMPLIANT _____ NON-COMPLIANCE

“LAZER” TRIM COAT

The coat shall be equipped with Silver Reflective piping for enhanced visibility. The piping will be constructed of NFPA compliant Silver Scotchlite Reflective material wrapped around a NOMEX Cording. The “Lazer” trim shall be sewn into the outside sleeve seam full length and around then entire arm-hole where the sleeve joins the body of the coat.

_____COMPLIANT _____ NON-COMPLIANCE

SECTION 4 – Pant Design and Construction

PANT CONSTRUCTION

The body of the shell shall be constructed of four separate body panels consisting of two front panels and two back panels and graded to size. The body panels shall be shaped so as to provide a tailored fit, thereby enhancing body movement, and will be joined together by double stitching with NOMEX® thread.

The body of the shell shall be constructed of six separate body panels consisting of two front panels, two back panels and two lower leg panels all graded to size. The body panels shall be shaped so as to provide a tailored fit.

_____COMPLIANT _____ NON-COMPLIANCE

ONE-PIECE LOVER LEG PANEL

The lower leg panels shall be of one-piece design and wrap around the lower leg terminating at a rear. The lower leg seam and will be joined together by double stitching with NOMEX® thread**.** This rear seam design will eliminate side seam abrasion at the cuff of the pants, thereby enhancing mobility and performance. *The use of “patch” to cover the side seams, essentially breaking the circumference trim band will be deemed inappropriate and in conflict with NFPA guidelines.*

_____COMPLIANT _____ NON-COMPLIANCE

SIZING

The Pants shall be available in even size waist and inseam measurements of 2-inch increments. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable.

_____COMPLIANT _____ NON-COMPLIANCE

LINER SYSTEM CONSTRUCTION

The thermal liner will be sewn to the moisture barrier at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The thermal liner and moisture barrier shall be stitched together and turned and top stitched to create a self- binding along the waist. The cuffs of the pant liner will be bound with Stedprene on cotton poly moisture resistant material to avoid wicking of contaminants.

_____COMPLIANT _____ NON-COMPLIANCE

MOISTURE BARRIER / THERMAL LINER ATTACHMENT

The thermal liner and moisture barrier shall be completely removable from the pant shell. Seven snap fasteners shall be spaced along the waistband to secure the thermal liner/moisture barrier to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of two snap fasteners per leg located at the side seams.

_____COMPLIANT _____ NON-COMPLIANCE

INSPECTION PORTAL (PANT)

The liner system will have an opening located at the top rear hem of the pant for the purpose of internal inspection. The opening will measure approximately 10 inches long and will be secured closed by corresponding 1-inch wide strips of FR Velcro installed on the liner system layers.

_____COMPLIANT _____ NON-COMPLIANCE

BLACK-OPS SUSPENDER SYSTEM

The pants will be equipped with four horizontal type belt loops at the inside upper waist for attaching the suspenders. Two in the front, one each side, and two in the back, one each side. The horizontal belt loops will be constructed of ½-

inch wide NOMEX Twill tape. The two front horizontal loops will be approximately four inches in length and bar-tacked in 1-inch increments, creating a series of one-inch wide loops. The rear horizontal belt loops will be three inches in length and stitched the same.

The series of loops will provide adjustment of the suspenders from side to side along the waist of the pants for increased comfort and performance.

The Black-Ops Suspenders will be ergonomic in design. The main one-piece body of the suspenders will be padded and 2.5-inches in width over the top of the shoulders. This creates a wider contact surface on the shoulder dispersing the weight over more area increasing comfort and support.

The rear straps of the suspenders will be adjustable to fit a wide range of torso lengths. The front suspender straps will be equipped with pull-tabs for final adjustment.

The front ends of the suspender body will be equipped with vertical mic straps/thumb loops.

The front of the suspenders will have a horizontal adjustable strap clip. The strap will act as a deterrent to keep the suspenders from slipping off the shoulders. The adjustable clip shall be located on the top of the left side suspender body so that it is padded against the chest. The strap will be attached to the edges of the right side suspender body to form a mic strap. The horizontal strap can be stored under the vertical mic straps on each side.

The ends of the suspender will be double layer elastic for comfort and flexibility. The suspender attachments will be one inch wide by 4-inch long straps with a snap fastener attached to the end. The straps will run through the horizontal belt loops on the pant and attachment to themselves with the snap fasteners. There will be two snap straps on each suspender ends.

_____COMPLIANT _____ NON-COMPLIANCE

WAISTBAND

The waist area of the Pants shall be reinforced on the inside with a separate piece of black NOMEX outer shell material not less than two inches in width. The top of the thermal liner and moisture barrier shall be secured to the underside of the waistband reinforcement so as to be sandwiched between the waistband reinforcement and outer shell to reduce the possibility of liner detachment while donning and to avoid pass through of snaps from the outer shell to the inner liner.

_____COMPLIANT _____ NON-COMPLIANCE

PANT CLOSURE SYSTEM

The exterior primary positive locking closure shall be a 2-inch wide Black KEVLAR Webbing Belt with high temperature thermoplastic buckle.

The internal fly flap closure shall consist of 1½-inch wide by full-length FR Velcro. The FR loop Velcro shall be sewn to the inside of the leading edge of the external fly flap. The corresponding portion of FR hook Velcro will be sewn to the right front body panel positioned to engage the loop portion when the external fly flap is in the closed position.

A snap fastener will be installed at the leading edge of the waistband for the purpose of further securing the Pants in the closed position.

_____COMPLIANT _____ NON-COMPLIANCE

BELT LOOPS

The Pants shall be equipped with a series of belt loops constructed of a double layer of outer shell material and spaced around the waist to accommodate the KEVLAR® belt. The front two belt loops shall be and will be of a 2-piece design – top and bottom. The top and bottom of each loop will attach to each other with snap fasteners and flame-resistant hook & loop Velcro sewn to ends

The pant shall also have two Pant Handle/Belt loops on each side, constructed of 1-inch Black NOMEX Twill tape and shall be located over the sides seams of the pant. On each side of the pant, two of the belt loops will extend above the waist of the garment and will be configured to form a "handle". The handle(s) will facilitate ease of donning and doffing.

_____COMPLIANT _____ NON-COMPLIANCE

OPTIONAL:

CLASS I KEVLAR BUNKER BELT

Each Pant will be provided with a belt measuring 2-inches in width and, constructed of KEVLAR® webbing material. The end of each belt shall be equipped with high temperature thermoplastic buckles for ease of attachment and adjustment. When the belt is ordered it will take the place of any specified Snap Hook and Dee-Ring as the positive closure.

OR:

CLASS II INTERNAL HARNESS

Each pant will be provided with a Class II Internal integrated Harness. The Harness will attach to the inside of the pant with a series of loops to accept the Class II Harness. The Harness front closure/attachment will act as the positive closure of the pant.

_____ *COMPLIANT* _____ *NON-COMPLIANCE*

EXTERNAL FLY FLAP

The fly flap will consist of a layer of thermal liner and moisture barrier material sandwiched between 2-layers of outer shell material. The fly will measure measuring approx. 9.5-inches long by 3.75-inches wide and will be double stitched to the left front body panel and centered over the pant opening. A snap fastener will be located at the top of the fly to assist in the closure.

_____COMPLIANT _____ NON-COMPLIANCE

BELLOWS POCKETS

Each pant will have two angled expansion pockets. The pockets will measure 2-inch deep by 10-inch wide by 10-inch high. The bellows pockets shall be double stitched to outside hip area of the pant. Two rust resistant metal drain eyelets shall be installed in the bottom of each bellows pocket to facilitate drainage of water. The lower half of the pocket shall be reinforced with an extra layer of KEVLAR Twill material on the inside.

The pocket flaps will be constructed of two layers of outer shell material, and shall measure 5-inches deep and ½-inch wider than the pocket. Two pieces of 1½-inch by 3-inch FR Velcro Velcro shall secure each flap in the closed position. The Velcro on the flap will be oriented in a vertical position while the Velcro on the pocket will be oriented horizontally allowing for the flap to be secured when the pocket is fully expanded. The upper pocket corners and pocket flaps shall be reinforced with bartacks.

_____COMPLIANT _____ NON-COMPLIANCE

PLEATED KNEES

The pants will have horizontal pleats located above the knee reinforcement to provide a greater range of motion. Two 2-inch pleats, will be located, one each side, along the front leg panels at the top of the knee area. The pleats above the knee will be fully functional, not like the knee pleat designs that fully and permanently employ each knee pleat, under the knee reinforcements, creating bulk and mass.

The liner knee shall also employ the same pleat design, but off-set to the shell pleat and located at the center of the knee to work in concert with the shell pleats.

_____COMPLIANT _____ NON-COMPLIANCE

SIDE-KICK KNEE REINFORCEMENTS

The knee area shall be reinforced with black "Stedshield" material. The knee reinforcement shall have a top radius edge and placed on the center of the knee area to ensure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure approximately 11-inches wide by 12-inches high and shall have an extension panel (Side-Kick) hugging the outside leg seams. The reinforcements will be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance.

_____COMPLIANT _____ NON-COMPLIANCE

PADDING UNDER KNEE REINFORCEMENTS

For greater thermal protection and comfort the knees will be padded with two extra layers of thermal liner material. The two layers material will be boxed stitched to the outer shell knees to prevent migration of the padding. The padding will be installed underneath the outside reinforcement layer of the knees.

_____COMPLIANT _____ NON-COMPLIANCE

PANT CUFF REINFORCEMENTS

The cuff area of the Pants shall be reinforced with black "Stedshield" material. The cuff reinforcement shall not be less than 2-inches in width and folded in half for approximately 1-inch exposure on the inside and outside of the leg openings. The cuff reinforcement shall be double stitched to the outer shell. Two NOMEX® snap tabs measuring approximately 1-inch long shall be attached to the inside of each leg of the outer shell approximately three inches from the bottom of the Pant leg. Snap fasteners will be installed at the end of each tab and at the bottom of the Pant thermal liner/moisture barrier within three inches of the cuff to secure the liner to the shell.

_____COMPLIANT _____ NON-COMPLIANCE

BOOT CUT

The Pant leg cuffs will be constructed such that the back of the leg falls higher than the front to avoid the chance of premature wear of the cuffs and improved interface with the fire boot.

_____COMPLIANT _____ NON-COMPLIANCE

RETROREFLECTIVE FLUORESCENT TRIM

The Pants shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to comply with the requirements of NFPA #1971 (2018 revision) in 3-inch lime/yellow 3M Triple Trim (L/Y borders with silver center).

_____COMPLIANT _____ NON-COMPLIANCE

"LAZER" TRIM PANT

The Pant shall be equipped with Silver Reflective piping for enhanced visibility. The piping will be constructed of NFPA compliant Silver Scotchlite Reflective material wrapped around a NOMEX Cording. The "Lazer" trim shall be sewn into the full circumference knee seam that joins the lower pant leg panel to the main body of the pants.

_____COMPLIANT _____ NON-COMPLIANCE

Evaluation of Proposals

The City of Gallatin will award the contract to lowest responsible and responsive bidder meeting specifications, quality, and performance standards pursuant to the Municipal Purchasing Act of 1983. Response will be based on the following factors;

- Completeness of response
- Cost
- Vendor track record, including references
- Quality of service
- Quality of product

Contract Award

The City of Gallatin reserves the right to reject any or all proposals and to waive any information found therein.

The City of Gallatin will award a contract based on evaluations described above.

6.0 Question Submissions

Gallatin Fire Department
Attn: Scott Woodard
119 GFD Memorial BLVD.
Gallatin, TN 37066
Telephone: 615-561-8217
Email: scott.woodward@gallatintn.gov

7.0 Proposal Submissions

ALL SUBMISSIONS MUST BE SEALED AND CLEARLY MARKED

"Turnout GEAR"

BID DUE DATE: March 5th, 2021 @ 3:00pm

Proposals shall be directed to the attention of:

Finance Department
Attn: J.R. Smith, Jr.
132 West Main Street
Gallatin, TN 37066
Telephone: 615-451-5899

PRICE SHEET

Price per SET: $_____

***Pricing is good for 90 days**

Name of Company: _____

Address: _____

Telephone: _____

Signature: _____

Print Name: _____

Title: _____

Email: _____

Date: _____

Iran Divestment Act:

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and believe that each bidder is not on the list created pursuant to §12-12-106.